

use of a site. However, we need far more data on solitary-roosting avian species that do not roost in holes, or colonially.

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STING-REMOVAL FROM BEES BY WHITE-EYED SLATY FLYCATCHERS  
*MELAENORNIS CHOCOLATINA*

Many bird species feed regularly or occasionally on stinging hymenoptera (see McAtee 1932, Birkhead 1974 and Fry 1984 for reviews) but only a few species, notably bee-eaters (Fry 1969) and shrikes (Gwinner 1961) are known to use specific behaviour patterns to remove or destroy the stinging apparatus before swallowing the insect. During three visits to the Lake Nakuru area, Kenya, in December 1981, April 1983 and April 1985 I repeatedly observed White-eyed Slaty Flycatchers catching honey bees *Apis* sp. and removing their stings in a rather sophisticated manner. Most of these observations were made in the garden of Lake Nakuru Lodge, where bees were common in flowering pepper trees. Typically, a foraging flycatcher caught a bee in the air and quickly flew with it to an appropriate, usually rather thick, horizontal branch. Holding the beak with the insect just above the perch, the bird then repeatedly squeezed the tip of the abdomen with the beak until the stinging apparatus emerged. Occasionally the stinging apparatus got stuck to the branch and was pulled out as the bird continued moving the insect. More frequently the stinging apparatus was squeezed out of the abdomen but remained attached to it. The bird then laid down the bee, grasped the stinging apparatus with the bill and flung it away with a sudden movement of the head. Immediately afterwards, the flycatcher swallowed the bee and then vigorously wiped its beak, as if to remove a distasteful or unpleasant substance.

The behaviour shown during sting removal was very swift and its individual components were hard to separate. Therefore, many observations were necessary to eventually gain the general picture described above. Still, I may have overlooked some features and time-lapse photography may be required to analyze the behaviour in detail. In 1981 two immature birds with spotted upperparts showed the same behaviour as the adults, but their movements were generally a bit slower and the entire pattern appeared more clumsy.

Sting removal may not be uncommon among birds that regularly feed on stinging hymenoptera, although it has as yet been described only from a limited number of species. Detailed observations of the feeding behaviour of insectivorous birds may reveal other techniques for sting-removal in other species.

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## A WEAVER ROOST AT HARGEISA, SOMALIA

Sir Geoffrey Archer (Archer & Godman 1961), when writing of the Red-billed Quelea *Quelea quelea* in NW Somalia over the period 1917-1922, stated that he had collected only seven specimens out of the few quite small parties seen, and considered it to be a rare bird. He also thought that as the cultivation of millet increased, so would the number of weavers occurring. In direct contrast however, Ash & Miskell (1983) were able by 1981 to describe it as an abundant non-breeding visitor to NW Somalia.

This note attempts to bridge the gap between these statements by describing very briefly the agricultural changes which took place in the 1940s and 1950s, and to record the discovery of a temporary mixed roost of weavers found at Hargeisa in late July 1958, together with some information on their habits. Finally, a general comment follows on the distribution and numbers of each species compared with the data of Archer & Godman (1961).

To set the occurrence of the weavers into perspective, a note on the agricultural scene is necessary. R.T. Shepherd kindly supplied data showing that 6000 ha were under cultivation, mainly to millet and maize, in ex-British Somaliland in 1947. During 1948-1953 the area was increased to 21 000 ha, after which no figures are available to 1958 (cultivation also increased in ex-Italian Somaliland over the same period from 56 000 ha to 300 000 ha) (data from FAO Production Year Books). In addition to the above large areas of the Hargeisa valley - to name but one locality - were also converted to fields during the years 1954-1958, supplying the habitat for the birds mentioned in this note.

The roost was located on the hillside to the NW of the town on